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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,669	11/24/2003	Masaaki Shimizu	02-105	1628
23400	7590	06/27/2005	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			SHAHER, RICKY D	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,669

Applicant(s)

SHIMIZU ET AL.

Examiner

Ricky D. Shafer

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/24/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Repay et al ('597).

Repay et al discloses a mirror angle control apparatus for a power mirror system that includes a mirror (24), the mirror angle control apparatus comprising a single electric motor (30); and first and second reciprocable members (35, 36) that are arranged between the motor and the mirror and are selectively reciprocated by rotational force conducted from the motor to tilt the mirror, wherein when the motor is rotated in a first rotational direction, the second reciprocable member is held stationary, and the first reciprocable member is reciprocated to tilt the mirror in a vertical direction; and when the motor is rotated in a second rotational direction, which is opposite from the first rotational direction of the motor, the first reciprocable member is held stationary, and the second reciprocable member is reciprocated to tilt the mirror in a horizontal direction, and wherein a central axis of the first reciprocable member and a central axis of the second reciprocable member are generally parallel to one another; the central axis of the first reciprocable member intersects a vertical imaginary line, which extends vertically through a center of the mirror, at a location spaced away from the center of the mirror; and the central axis of the second reciprocable member intersects a horizontal imaginary line, which extends

Art Unit: 2872

horizontally through the center of the mirror, at a location spaced away from the center of the mirror. Note figures 1, 3 and 5 along with the associated description thereof.

3. Claims 1-4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurz, Jr. ('014).

Kurz, Jr. discloses a mirror angle control apparatus for a power mirror system that includes a mirror (40), the mirror angle control apparatus comprising a single electric motor (121); and first and second reciprocable members (54, 56) that are arranged between the motor and the mirror and are selectively reciprocated by rotational force conducted from the motor to tilt the mirror, wherein when the motor is rotated in a first rotational direction, the second reciprocable member is held stationary, and the first reciprocable member is reciprocated to tilt the mirror in a vertical direction; and when the motor is rotated in a second rotational direction, which is opposite from the first rotational direction of the motor, the first reciprocable member is held stationary, and the second reciprocable member is reciprocated to tilt the mirror in a horizontal direction, wherein the first reciprocable member is connected to the mirror through a first universal joint assembly (58,62); and the second reciprocable member is connected to the mirror through a second universal joint assembly (60,62) and wherein a central axis of the first reciprocable member and a central axis of the second reciprocable member are generally parallel to one another; the central axis of the first reciprocable member intersects a vertical imaginary line, which extends vertically through a center of the mirror, at a location spaced away from the center of the mirror; and the central axis of the second reciprocable member intersects a horizontal imaginary line, which extends horizontally through the center of the mirror, at a

Art Unit: 2872

location spaced away from the center of the mirror. Note figures 2, 4 and 5 along with the associated description thereof.

4. Claims 1-5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mittelhauser ('342).

Mittelhauser discloses a mirror angle control apparatus for a power mirror system that includes a mirror (5), the mirror angle control apparatus comprising a single electric motor (19); first and second reciprocable members (14) that are arranged between the motor and the mirror and are selectively reciprocated by rotational force conducted from the motor to tilt the mirror, wherein when the motor is rotated in a first rotational direction, the second reciprocable member is held stationary, and the first reciprocable member is reciprocated to tilt the mirror in a vertical direction; and when the motor is rotated in a second rotational direction, which is opposite from the first rotational direction of the motor, the first reciprocable member is held stationary, and the second reciprocable member is reciprocated to tilt the mirror in a horizontal direction, wherein the first reciprocable member is connected to the mirror through a first universal joint assembly (13); and the second reciprocable member is connected to the mirror through a second universal joint assembly (13) and wherein a central axis of the first reciprocable member and a central axis of the second reciprocable member are generally parallel to one another; the central axis of the first reciprocable member intersects a vertical imaginary line, which extends vertically through a center of the mirror, at a location spaced away from the center of the mirror; and the central axis of the second reciprocable member intersects a horizontal imaginary line, which extends horizontally through the center of the mirror, at a location spaced away from the center of the mirror, first and second rotatable members (15) that are rotatable relative to and are slidably

Art Unit: 2872

engaged with the first and second reciprocable members, respectively; and a switchable type transmission mechanism (17,18 20) that is arranged between the motor and the first and second rotatable members, wherein one of the first reciprocable member and the first rotatable member has a first endless helical groove (see Fig. 1), which includes two helical groove sections that extend in opposite helical directions, respectively, and are connected one another to form an endless path, and the other one of the first reciprocable member and the first rotatable member has a first slide piece (16), which is slidably received in the first endless helical groove; one of the second reciprocable member and the second rotatable member has a second endless helical groove, which includes two helical groove sections that extend in opposite helical directions, respectively, and are connected one another to form an endless path, and the other one of the second reciprocable member and the second rotatable member has a second slide piece (16), which is slidably received in the second endless helical groove; when the motor is rotated in the first rotational direction, the switchable type transmission mechanism transmits rotational force of the motor to the first reciprocable member through the first rotatable member and prevents transmission of the rotational force of the motor to the second reciprocable member through the second rotatable member; and when the motor is rotated in the second rotational direction, the switchable type transmission mechanism transmits rotational force of the motor to the second reciprocable member through the second rotatable member and prevents transmission of the rotational force of the motor to the first reciprocable member through the first rotatable member.

Note figures 1-4 along with the associated description thereof.

5. Claims 1-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mittelhauser ('342).

Mittelhauser discloses a mirror angle control apparatus for a power mirror system that includes a mirror (4), the mirror angle control apparatus comprising a single electric motor (19); first and second reciprocable members (10) that are arranged between the motor and the mirror and are selectively reciprocated by rotational force conducted from the motor to tilt the mirror, wherein when the motor is rotated in a first rotational direction, the second reciprocable member is held stationary, and the first reciprocable member is reciprocated to tilt the mirror in a vertical direction; and when the motor is rotated in a second rotational direction, which is opposite from the first rotational direction of the motor, the first reciprocable member is held stationary, and the second reciprocable member is reciprocated to tilt the mirror in a horizontal direction, wherein the first reciprocable member is connected to the mirror through a first universal joint assembly (7,9); and the second reciprocable member is connected to the mirror through a second universal joint assembly (8,9) and wherein a central axis of the first reciprocable member and a central axis of the second reciprocable member are generally parallel to one another; the central axis of the first reciprocable member intersects a vertical imaginary line, which extends vertically through a center of the mirror, at a location spaced away from the center of the mirror; and the central axis of the second reciprocable member intersects a horizontal imaginary line, which extends horizontally through the center of the mirror, at a location spaced away from the center of the mirror, first and second rotatable members (13) that are rotatable relative to and are slidably engaged with the first and second reciprocable members, respectively; and a switchable type transmission mechanism (17,20,25,26,27,28) that is arranged between the motor and the first and second rotatable members, wherein one of the first reciprocable member and the first rotatable member has a first endless helical groove (16), which includes two helical groove

Art Unit: 2872

sections that extend in opposite helical directions, respectively, and are connected one another to form an endless path, and the other one of the first reciprocable member and the first rotatable member has a first slide piece (15), which is slidably received in the first endless helical groove; one of the second reciprocable member and the second rotatable member has a second endless helical groove (16), which includes two helical groove sections that extend in opposite helical directions, respectively, and are connected one another to form an endless path, and the other one of the second reciprocable member and the second rotatable member has a second slide piece (15), which is slidably received in the second endless helical groove; when the motor is rotated in the first rotational direction, the switchable type transmission mechanism transmits rotational force of the motor to the first reciprocable member through the first rotatable member and prevents transmission of the rotational force of the motor to the second reciprocable member through the second rotatable member; and when the motor is rotated in the second rotational direction, the switchable type transmission mechanism transmits rotational force of the motor to the second reciprocable member through the second rotatable member and prevents transmission of the rotational force of the motor to the first reciprocable member through the first rotatable member, wherein each of the first and second rotatable members is formed into a cylindrical body that has a cylindrical blind hole (see Fig. 5), which is opened in one end of the rotatable member; each of the first and second reciprocable members is formed into a cylindrical body that has an outer diameter smaller than an inner diameter of the cylindrical blind hole of the corresponding rotatable member and is reciprocally received in the cylindrical blind hole of the corresponding rotatable member; the first endless helical groove is formed in one of an inner peripheral surface of the first rotatable member and an outer peripheral surface of the first

Art Unit: 2872

reciprocable member; the first slide piece is rotatably arranged in the other one of the inner peripheral surface of the first rotatable member and the outer peripheral surface of the first reciprocable member, wherein a rotational axis of the first slide piece extends in a direction generally perpendicular to of the first reciprocable member; a reciprocating direction the second endless helical groove is formed in one of an inner peripheral surface of the second rotatable member and an outer peripheral surface of the second reciprocable member; and the second slide piece is rotatably arranged in the other one of the inner peripheral surface of the second rotatable member, wherein the switchable type transmission mechanism includes a worm gear (20) that is connected to the motor and is rotated by the rotational force of the motor; a first one-way clutch mechanism (17) that is placed between the worm gear and the first rotatable member, wherein the first one-way clutch mechanism conducts the rotational force from the worm gear to the first rotatable member and to the first reciprocable member upon rotation of the motor in the first rotational direction and prevents conduction of the rotational force from the worm gear to the first rotatable member and to the first reciprocable member upon rotation of the motor in the second rotational direction; and a second one-way clutch mechanism (17) that is placed between the worm gear and the second rotatable member, wherein the second one-way clutch mechanism conducts the rotational force from the worm gear to the second rotatable member and to the second reciprocable member upon rotation of the motor in the second rotational direction and prevents conduction of the rotational force from the worm gear to the second rotatable member and to the second reciprocable member upon rotation of the motor in the first rotational direction.

Note figures 1-5 along with the associated description thereof.

6. Claims 5-9 are objected to because of the following informalities:

In claim 5, lines 12 and 20, the language "connected" should be changed to read --connected to--.

In claim 6, line 4, the language "boy" should be changed to read --body--.

Appropriate correction is required.

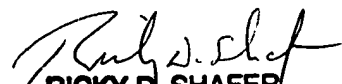
7. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS

June 23, 2005


RICKY D. SHAFER
PATENT EXAMINER
ART UNIT 2872